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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,230	11/25/2003	Eugene F. Giszczynski	2376.2142-001	6692
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EXAMINER				
ZHU, BO HUI ALVIN				
ART UNIT		PAPER NUMBER		
2465				
MAIL DATE		DELIVERY MODE		
11/23/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/722,230

**Applicant(s)**

GISZCZYNSKI ET AL.

**Examiner**

BO HUI A. ZHU

**Art Unit**

2465

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08/11/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The amendment filed on August 11, 2009 has been entered.

Claims 18 - 38 are pending.

Claims 18 - 38 are rejected.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18 - 19, 22 - 26, 29 - 32, 34 and 35 - 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruber et al. (US 6,563,795) in view of Tsutsui (US 5,150,356).

(1) with regard to claims 18, 31 and 34:

Gruber et al. discloses a method comprising: originating at least one of operations, administrative and maintenance calls (OAM cell, Fig. 2) at a source network element (node A, Fig. 3) on a virtual path (1, 2, 3..., Fig. 3) in a given direction around the virtual path (downstream direction along the virtual path); and monitoring for the at least one of the operations, administrative and maintenance calls at the source network

element on the virtual path (node A monitors for the OAM cell as the OAM cell loops back to node A, column 4, lines 10 - 35).

Gruber et al. does not disclose the calls arrive at the source network element in the given direction around the virtual path.

Tsutsui teaches a network configuration in which a cell generated at a source node is able to travel back to the source node around a unidirectional ring (Fig. 3a).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Gruber et al. to include the feature of the calls arriving at the source network element in the given direction around the virtual path as shown in Tsutsui in order to allow OAM cells to travel back to the source node even at the event that downstream virtual path is broken.

(2) with regard to claims 19, 26 and 32:

Gruber et al. further discloses originating a second at least one of operations, administrative and maintenance calls at an intermediate network element on the virtual path and monitoring for the second at least one of the operations, administrative and maintenance calls at the source network element on the virtual path (column 4, lines 24 – 25, lines 53 - 65).

(3) with regard to claims 22, 24 and 29:

Gruber et al. further discloses assigning the at least one of operations, administrative and maintenance calls and the second at least one of operations, administrative and maintenance calls, to the virtual path (column 4, lines 12 - 17).

(4) with regard to claims 23, 25, 30, 36 and 38:

Gruber et al. further discloses checking cells arrived at the source network element to find the at least one of operations, administrative and maintenance calls (column 4, lines 29 - 35).

(5) with regard to claim 35:

Gruber et al. further discloses originating the virtual circuit at the source network element and terminating the virtual circuit at the source network element to form a ring (Fig. 3, i.e. OAM trace cell is originated at node A and is looped back to node A).

(6) with regard to claim 37:

Gruber et al. further discloses originating the second virtual circuit at the intermediate network element and terminating the second virtual circuit at the source network element to form a ring (Fig. 6, i.e. OAM trace cell is originated at node D and is looped back to node A).

4. Claims 21 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruber et al. (US 6,563,795) in view of Huey et al. (US 5,467,349).

(1) with regard to claims 21 and 28:

Gruber et al. discloses a method comprising: originating at least one of operations, administrative and maintenance calls (OAM cell, Fig. 2) at a source network element (node A, Fig. 3) on a virtual path (1, 2, 3..., Fig. 3); and monitoring for the at least one of the operations, administrative and maintenance calls at the source network element on the virtual path (node A monitors for the OAM cell as the OAM cell loops back to node A, column 4, lines 10 - 35).

Gruber et al. however does not disclose the virtual path is unidirectional.

Huey et al. discloses the use of unidirectional virtual path (see column 2, lines 39 - 40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Gruber et al. to include the feature that the virtual path is unidirectional as shown in Huey et al. in order to optimize the use of virtual path identifiers and bandwidth of the system.

5. Claims 20, 27 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gruber et al. (US 6,563,795) in view of Tsutsui (US 5,150,356) and further in view of Cappellari et al. (US 5,557,611).

(1) with regard to claims 20, 27 and 33:

Gruber et al. discloses all of the subject matter as discussed in the rejection of claim 18 above. Gruber et al. however does not disclose performing statistical multiplexing on the virtual path.

Cappellari et al. teaches using statistical multiplexing (see column 4, lines 37 – 43).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Gruber et al. to include the feature of performing statistical multiplexing as shown in Cappellari et al. in order to improve bandwidth efficiency as statistical multiplexing would provide a saving on the bandwidth assigned to virtual paths.

***Response to Arguments***

6. Applicant's arguments with respect to claims 18, 26 and 31 have been considered but are moot in view of the new ground(s) of rejection.
7. Applicant's arguments with respect to claims 21 and 28 have been considered but are not persuasive. Applicant contends that the combination of Gruber and Huey would not work because the path of Gruber must be bidirectional path, and Huey teaches a unidirectional path (Remarks, page 9). Examiner respectfully disagrees. Gruber's system uses bidirectional paths so that OAM cells could travel back to the source node through the same path but in a reversed direction. However, using bidirectional path is not the only way that would allow an OAM cell to travel back to the source node. Although offering different advantages than using bidirectional paths, a separate unidirectional path could also be used to loop back an OAM cell to the source node.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BO HUI A. ZHU whose telephone number is (571)-270-1086. The examiner can normally be reached on Mon-Thu 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571)-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. A. Z./  
Examiner, Art Unit 2465

/Jayanti K. Patel/  
Supervisory Patent Examiner, Art Unit 2465